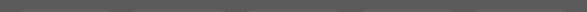

APPLIED TROPHOLOGY, VOLUME 4

Applied Trophology, Vol. 4, Nos. 11–12 (November/December 1960)

“Sea Salt,” “Dietary Deficiency of Vitamin C Held Still a Possibility,” “Whole Nutrition,” “The Syndrome of Magnesium Deficiency in Man,” “Old Fashioned,” “Gastric Irritant,” “Therapeutics (Heart Extract),” plus Tip of the Month (Milk of Magnesia) and High Points of Cardiotrophin PMG

The following is a transcription of the November/December 1960 issue of Dr. Royal Lee's *Applied Trophology* newsletter, originally published by Standard Process Laboratories.

Sea Salt

Its minerals and their importance in the dietary pattern. The sodium chloride commonly used as table salt is a refined chemical. Natural food products are seldom found in a natural refined state. Salt is an exception to this general rule. When a sea dries up, as at Salt Lake, Utah, the sodium chloride is the first to separate by crystallization. Rainfall aids in washing and draining away of the residual salts and impurities, leaving a relatively refined sodium chloride. Manmade salt from seawater is similarly “purified” by the same natural process, so it is erroneous to consider the resulting product as “whole sea salt.”

The major components of seawater salts, according to the order of magnitude of these elements rather than their relative nutritional value, are as follows:

Chlorine	55.2%
Sodium	30.4
Sulfur as 'SO4	7.7
Magnesium	3.7
Calcium	1.16
Potassium	1.1
Carbon as carbonic acid and 'CO3	.35
Bromine	.19
Boron as H2BO3	.07
Strontium	.05

The minor elements in seawater salts include forty more elements that, no doubt, contain every known or unknown trace element of nutritional significance.[1] In the major listing above, the outstanding nutritional mineral elements are the calcium, potassium, magnesium and sulfur compounds.

Calcium deficiency is common, according to Henry Sherman, who tells us: “Autopsies are said to show a high proportion of osteoporosis (bone deficient in medical calcium) in supposedly normally nourished adults examined in midwestern medical colleges.” Henry Sherman quotes Dr. F.J. Stare, the Harvard nutritionist, as follows: “It was a surprise to me to see that a majority of X-ray studies on adults past the age of forty-five to fifty years showed considerable demineralization of bone, and one wondered if a low dietary intake of calcium, or of vitamin D over many years, might not have been prominent factors…”[2]

The bones happen to be the storehouse of reserve body calcium. Calcium deficiency in the American diet (complicated by other deficiencies of course) results in our three-billion-dollar bill for dental repairs each year, loss of teeth from pyorrhea, premature broken hips, poor coagulation of blood, and chronic fevers in children. The host of nervous conditions aggravated by this deficiency of calcium has created a market for the many new tranquilizers that are constantly being invented.

Potassium, the next element to consider, is also commonly deficient in our refined foods. This results in a predisposition to bulbar poliomyelitis,[3] kidney disease,[4] heart disease,[5] diabetic coma,[6] congestive heart failure, liver cirrhosis and steatorrhea,[7] rheumatic heart lesions,[8] spastic paralysis,[9] and confusional psychosis.[10]

Magnesium is not recognized as fully as it should be as a possible deficiency. It contributes thereby to epilepsy,[11] tetany, simulating hypocalcemic tetany,[12] hepatitis and nephritis with deposition of calcium in vascular tissues and nerve fibers,[13] edema of extremities and nasal region, hyperirritability leading to tonic-clonic convulsions, erythema, hemorrhages, and exfoliation.[14] This deficiency may also contribute to a syndrome of tachycardia, vasodilatation, convulsions and death,[15] or dilation of blood vessels, blood congestions, hyperexcitability, nutritional failure, cachexia; also enhances calcification of the kidney and creates a predisposition to varicose veins and hemorrhoids.[16] (It is of interest to find that the homeopathic remedy for varicose veins and hemorrhoids is the plant Collinsonia, in which the active principal has been identified as magnesium phosphate. Homeopathic materia medicas list magnesium phosphate as a remedy for tetany.)

Magnesium deficiency causes vasodilatation and overexcitability; milk and cereal diets tend to create magnesium deficiency.[17] Also, chronic alcoholism is apparently a common cause of a magnesium deficiency syndrome manifested by muscle tremor, choreiform movements, and sometimes convulsions or delirium.[18] Further symptoms of magnesium deficiency are described by Dr. Wm. A. Albrecht in his book *Soil Fertility and Animal Health*. We herewith reproduce a pertinent story from this volume:

> The essentiality of magnesium in the soils and feeds as protection against microbial troubles, in the intestinal tract as “white scours” and in the lungs as pneumonia, brought itself into strong light by some observations of dairy cattle on the Brookside Farms near Knoxville, Ohio, several years ago. A new calf and maternity barn, built especially to improve sanitation in the struggle against the high mortality rate (23 to 41 percent) among newborn calves gave occasion to have the sick calves eat the plastered walls and suggest the reason for their poor survival rate. The high mortality rate with young chicks had eliminated the poultry project of the farm. The swine breeding program had been abandoned because of the high mortality rate among the pigs. So-called animal “diseases” because of poor animal nutrition via deficient soil fertility, growing the farm feeds was undermining the separate animal enterprises and thereby the business as a whole.
>
> Even after concentrating on dairying, the mammary disturbances—milk fever and mastitis—in the milk cows, increasing shy-breeders, and the loss of 49 calves one season out of a single crop of 120, as about the usual annual number, was reason for stalls with their walls plastered with two coats. Only a few of the stalls had the second coat applied, and the remaining stalls had only the rough first coat when the fall weather put the calves into the barn. The mortality trouble continued. Calves were born weak, with slow reflexes and no appetite; dietary scours developed in 100 percent of the cases were accompanied by a low type of pneumonia with much coughing; calves that died invariably went down with convulsions and no calf ever go into the convulsion stage lived beyond six hours. Strong, disagreeable odors were present in the stable. Calves that lived through the first 90 days showed remarkable recuperative ability and matured to good size without any signs of these calfhood disorders.
>
> The observation was then made that the calves were severely mutilating the walls that had been finished with the second coat of plaster. This provoked the query, “Why are the calves trying to eat the finish coat of plaster when the walls with only the first plaster coat are not mutilated or eaten?” Chemical analysis of the plaster used as finish showed that it was made from dolomitic limestone. The limestone's analysis gave near 54 percent calcium carbonate and over 45 percent magnesium carbonate or dolomitic limestone. With this came the suggestions that the calves know their own medicine and are capable chemists in discriminating between the finish coat of plaster made from dolomitic lime and the first plaster coat from a calcium lime.
>
> This shifted the feeding practices to include dolomitic limestone in place of calcium limestone as mineral supplement to the grain ration supplement containing 16 percent protein. The soils were tested to find magnesium the lowest, or the limiting element, and were then limed with dolomitic stone. In two weeks after the changed feeding of the cows giving the milk for the calves, the disagreeable odor in the barn was becoming less, and there were changes in the droppings of the calves. There was increase in their thirst. They became alert, and the scours condition cleared from the older calves. After this improvement in animal health had occurred, the remaining stalls were given the finish coat of plaster with no single tooth mark or mutilation of the walls. Other evidence of better animal health was: a) the disappearance of mastitis, which had been as high as 50 percent; b) improved conception; and c) strong, normal calves that did not go through the scours stage. Decided improvements in the crops resulted from magnesium additions to the soil. The corn plants were not so readily “fired”; the gram yields were increased; and the alfalfa went through the winter better; all as evidence that the plants just as well as the cows as a consequence were suffering because of a deficiency of magnesium in the soil.

We may consider sulfur as the next element of importance in seawater. Sulfur is an element required in the detoxication of certain waste products of metabolism in the body. It is not overly available in common foods, at least not in the form of calcium sulfate as found in seawater. Most nutritionists, in discussing this subject, only consider the sulfur of the amino acids. The detoxifying role is indicated by the fact that in glomerulo-nephritis the urinary sulfur output is greatly reduced. The urochrome of urine, the material that gives color to urine, is a sulfur compound.

It is eliminated at a rate parallel with the basal metabolism of the subject.[19] The significance and source of urochrome is still a mystery. At the Colorado Agriculture Experiment Station in 1947, it was determined that by feeding lambs supplementary elementary sulfur the losses from enterotoxemia were reduced from 8.2 percent to less than 1 percent.[20] (Grandmother was sound, no doubt, with her spring fever remedy of sulfur and molasses or, as minerals go, sulfur and potassium.)

The amino acid cystine and its reduced form cysteine contain sulfur in a so-called sulfhydryl (-SH) combination. Hydrogen and sulfur otherwise may combine as the evil smelling hydrogen sulfide gas. The sulfhydryl radical in organic combination is a growth stimulator and activates all healing processes. Cysteine hydrochloride with boric acid is a recommended aid to wound healing.[21] This sulfhydryl is most important in restoring function in old scar tissue in lesions of the eye. We quote a reference from *Women's Home Companion,* July 1951, p. 40, entitled, “Your Eyes are Safer Now.”

> You'll find this hard to believe, just as the doctors did, but there has never been an eye case treated with sulfhydryl (used in the proper way) that has not shown some degree of response. The compound is in no sense a cure-all and must be employed under a physician's direction, but it does have an extraordinary affinity to the eye. It can clear up many types of complications formerly believed hopeless.
>
> Let's see what it does to burns.
>
> Dr. Hedwig Kuhn of Hammond, Indiana, who works in the state's large steel-producing area, has reported in *Industrial Medicine* such cases as these:
>
> A boy of nineteen received sulphuric acid directly into his eye in a factory accident. After treatment with sulfhydryl and castor oil once a day for six days he was completely recovered and his vision normal.
>
> A man of fifty-eight, working in a metal plant, accidentally got molten aluminum into an eye. Ten days later, after sulfhydryl therapy, he could see as well as ever.
>
> A man of fifty-one had a strong lye solution thrown into his face, hitting one eye. He did not seek medical aid for eighteen days and was in very bad condition when he did. So bad, in fact, that it was doubtful if the eye could be saved. Yet forty days after beginning sulfhydryl treatment his vision was nearly perfect and there was no scar…
>
> Pain stops almost as soon as the medication is applied. Generally the patient is back at work within a few days, depending of course on the extent of the wound.
>
> Dr. Archie Cruthirds of Phoenix, Arizona, who has treated more than a thousand complicated burns of this sort, has stated that he feels the black capsules containing the sulfhydryl- oil mixture (which you can now buy at your druggist's) should be kept in every home in America.
>
> “As emergency treatment before seeing a physician,” he told me, “the capsules are unsurpassed. In minor burns of the eye they might be all that was needed, though a medical man should examine the injury of course. In severe burns they might mean the difference between sight and blindness.”
>
> It was Dr. Cruthirds, among others, who started using artificial sulfhydryl in other ophthalmological problems. Reasoning that the compound had been shown to promote the growth of healthy tissue, he wondered if it would not also control and repair tissue that was irritated or scarred.
>
> Recently he was called in consultation to decide whether or not to excise the eye of a teenage Mexican girl. A piece of grit was embedded in her cornea, and when Dr. Cruthirds first saw her the eye was a mass of infection, without vision, and so painful that the girl had not slept in days.
>
> Instead of surgery Dr. Cruthirds suggested a trial of sulfhydryl drops in the eye and more of the solution by mouth. The oral administration, he said, was vital, as it would counteract the poisons that the infection was sending through the child's body, and so hasten the healing.
>
> Five days later the girl was out of pain. The redness was leaving the eye, the infection subsiding. Three weeks later she could see her hand before her face and her vision was steadily improving. The surgeons put away their knives for good.
>
> “This case, of course, was of the utmost seriousness,” Dr. Cruthirds said. “But many physicians besides myself now prescribe drops of sulfhydryl as a matter of routine in foreign body cases. Anything you get into your eye, you see, scratches the cornea or irritates it or both. From such injury corneal ulcers develop oftener than the layman realizes. But sulfhydryl will remove that threat by repairing bruised tissue almost immediately.”
>
> Perhaps the most astonishing field of Dr. Cruthirds' work has been the use of sulfhydryl to eradicate opaque white patches on the cornea caused by external damage, ulceration, or infection. These patches sometimes cover the whole visible portion of the eye. If they do not cause complete blindness they invariably diminish vision to some degree.
>
> Dr. Cruthirds says that in treating corneal scars the ophthalmologist—and the patient—must allow plenty of time for the physical reaction to sulfhydryl to take place, usually several months or more, and that the compound must be taken by mouth as well as in eye drops.
>
> He cites the case of a twenty-five-year-old veteran who had lost one eye in battle. The scar tissue over the remaining eye was so thick that the extent of his vision was the motion of a hand at ten feet. Surgeons in New York had told him that his only hope for even partial sight was a corneal graft, a “window operation” on the second eye, and he had sent him to Arizona to get strong before the surgery. But they knew as they bade him goodbye that even an operation might not work. In one-eyed people the number of grafts that “take” is never more than fifty out of a hundred.
>
> Dr. Cruthirds is a consultant to the Veterans Hospital near Phoenix. He watched the nurses feed the boy, watched them lead him from place to place, saw the despair in his face. There was nothing to lose in suggesting a trial of sulfhydryl and perhaps everything to gain. The boy agreed.
>
> In a few days the oral and local administration of the compound had stopped the intense watering of the injured eye, and the veteran was comfortable for the first time in years. And then the miracle began. In two weeks he could read the face of an alarm clock across the room. In four months he was reading the third line on an optical chart. He was daily getting more and more vision. And though perhaps he will never be able to see perfectly with that eye, he can now get around by himself. The risky surgery has been permanently canceled.
>
> Dr. W.H. Belknap of Portland, Oregon, an ophthalmologist who has been testing sulfhydryl extensively for years, adds a case that is equally surprising.
>
> His patient was a woman in her sixties, one of whose eyes had been heavily scarred by a corneal ulcer thirty-eight years before. She was nearly blind in the eye and, because of the age and thickness of the tissue, it was most doubtful if anything could help her.
>
> The lady took drops of sulfhydryl after each meal and also applied it to her eye daily. Here is Dr. Belknap's report of the case, as published in *The Transactions of the American Academy of Ophthalmology and Otolaryngology*:
>
> “General condition of the patient showed early improvement but no change in scar was noted until after approximately six months. Following this, scar almost entirely disappeared. Vision, with correction, has returned to 20/30 (almost normal) with a very pronounced improvement in the appearance of the eye and especially the cornea. This was an unexpected result, as the scar, which had developed over a period of thirty-eight years, had grown heavy with a gradual loss of vision despite any treatment previously applied.”
>
> The physicians I have quoted are only a few of the medical men who are using the new compound. They and many others are continuing research with it, both in the eyes—on such things as its effect on early cataract, for instance—and in other clinical situations. There is reason to believe that it may prove as valuable in serious burns on all parts of the body as it has proven in corneal burns. There has even been some proof that it will work on burns caused not only by the flash of an atomic bomb but on those caused by radioactivity itself, for it has already cleared up old X-ray damage in a few cases.

(The sulfhydryl referred to here is sold through pharmacies as “Hydrosulphosol” in forms for both oral administration and topical application. Apparently it is on the A.M.A. blacklist as we fail to find it listed in any pharmacopeia.)

The sulfhydryl radical seems to be the basic cell division regulator of animal growth. Glutathione, one of the carriers of this factor, is known to control the size of the fowl that grows from an egg, by its relative concentration in the egg before it is put into an incubator. The more glutathione, the more cell division before hatching, and the larger the adult bird.[22] (Agricultural Experiment Stations should investigate this.)

Apparently, to be healthy, we need seawater or its minerals. In the Pacific Northwest where rainfall is high almost all soluble minerals have been washed out to the sea. Water from the Columbia River has for many years been used by Portland, Oregon, filling stations, as distilled water in car batteries. We have been told that telephone companies in that area have many customers who insist on light on phones instead of bells. The reason for this is that people are jumpy and nervous, like test animals lacking magnesium, that go into convulsions if frightened by sudden noises. Diseases like multiple sclerosis seem to be more common there, possibly due to the greater deficiency of sulfur. These paralytic degenerative conditions seem particularly amenable to sea minerals.

In the epilogue to *Soil Fertility and Animal Health*, Dr. Jonathan Forman says:

> Albrecht's message is, in the main, just as applicable to humans as to cattle.
>
> We pride ourselves that we of the United States of America are the healthiest people in the world.
>
> A recent survey of the physical condition of our youth by Prudeen and Kraus has shocked us all. They tested over 4000 American youths for muscular fitness and compared them with some 3,000 European youths. Fifty-eight percent of the American youths failed to meet their minimum standards whereas only nine percent of the European youths failed to measure up to these tests. We all remember how many of our young men failed to pass the selective service tests for fitness for military duty although they had been lowered considerably from those of the first World War's draft.
>
> It is obvious that plants must depend upon the available supply of minerals in the soil in which they are growing for the elements essential to their lives; that man and his domestic animals in turn must depend upon the plants for these nutrients.
>
> Investigations of the last 30 years extending to many lands have shown that such disorders are, in fact, nutritional deficiencies resulting from an inability of the local soils to furnish the essential mineral needs of these animals in adequate amounts or in proper proportions.
>
> As with animal and human diseases, so with plant diseases. The impact of the favorable factors and the unfavorable factors gives a happy balance or an aggravation of the disease.

Hard water (due to its greater mineral content) is necessary in the successful operation of a cattle ranch. Fast growing animals like cattle and pigs need great amounts of calcium and other bone building elements. The calcium in seawater is mainly calcium sulfate.

Careful tests in feeding pigs, at Rutgers University, showed that unrefined sea salt caused a growth ⅛ greater in the test lot, over that in the control lot, where the feed was identical except for the use of refined salt. The growth of the pigs was, no doubt, inhibited by calcium deficiency when on the usual diet. What farmer can afford to lose ⅛ of his gross income by using the wrong salt? Taken the country over, this loss would be an astronomical sum.

References

1. W. Harvey. *Recent Advances in the Chemistry and Biology of Sea Water.* Cambridge University Press, 1945.
2. *Chemistry of Food and Nutrition*, Eighth Edition, pp. 268, 282. Macmillan, 1954.
3. *A.M.A.*, 146, p. 1018, 1951.
4. *Int. Med.*, pp. 20, 27, 88, 1951.
5. *Path*, pp. 484–495, 1952–53.
6. *Jol. Australia*, p. 285, 1954.
7. *Lancet*, 2:1190–1192, 1956.
8. Peschel, et al. *Abstracts*, October 1952.
9. *Reviews*, pp. 285–311, 1951.
10. *Jol. Australia*, 1(1):285–290, 1954.
11. B. Barnett, MD. "Magnesium Deficiency in Epilepsy," *Clinical Studies*. (Report by Deaf Smith Research Foundation, Hereford, Texas.)
12. *New England Journal of Medicine*, 262:155, 1960.
13. *Path.*, 26:820–838, 1938.
14. *Nutrition*, 14(1):102–103, 1937.
15. V. McCollum. *Recent Advances in Nutritional Research*, p. 47. Bruce Pub. Co., 1937.
16. *Biol. Chem.*, 119(I):XL–XLI, June 1937.
17. *Minerals in Nutrition*, pp. 75-77. Wirtschafter, Reinhold, 1942.
18. *A.M.A.*, p. 1496, April 21, 1959.
19. T. Shohl. *Mineral Metabolism*, p. 201. Reinhold, 1938.
20. *Am. Vet. Med. Assn.*, August 1947.
21. Whittemore and Van Nostrand. *Organic Chem.*, p. 599, 1945.
22. Joseph Needham. *Biochemistry and Morphogenesis*. Cambridge Univ. Press.

Dietary Deficiency of Vitamin C Held Still a Possibility

English Physician Believes Cases Are Most Likely Seen Among Institutions

Swansea, Eng. – “That dietary deficiency of vitamin C remains a possibility is emphasized by instances of overt scurvy which, exceptionally, do still occur,” states Dr. M.K. Strelling of the Morriston Hospital, here.

Such occurrences are most likely to be encountered in institutions, he indicates.

The doctor says that 16 examples of scurvy in infants and children and 17 in adults have been reported in England and Wales in the last decade. In all but one case the patient failed to take a mixed diet containing fruit and vegetables. The exception was a 15-months old boy in an institution, whose case Dr. Strelling describes in detail.

The child had been given 50 mg of ascorbic acid daily until he was 9 months old and then, for 6 months, had received 1 teaspoon of rose-hip syrup a day, an amount that provided roughly 7 mg.

Diet Felt Lacking

Since the child developed scurvy, his diet could not have contained very much ascorbic acid, it is pointed out.

Losses of vitamin C from food can occur in various ways, Dr. Strelling comments. These are “particularly apt to occur in institutions,” due to storage, cooking, keeping food hot, and boiling milk after it has been pasteurized, he says.

According to the physician, this one case emphasizes how a diet that is relatively fixed and relies on everyday methods of preparing vegetables may be grossly deficient in vitamin C. He notes a report in the literature that gingivitis is a common finding in institutional groups of children and young people.

The report appears in the *British Medical J.*, 5174:701, 1960.

—*Drug Trade News*, May 30, 1960

Whole Nutrition

One cannot overemphasize the importance of a whole and wholesome nutrition before and during pregnancy to make the most of the normal action of genes. In a large sense, proper nutrition is indispensable throughout life, childhood being as important in this regard as adulthood and old age. Scientists, physicians, and dentists in the know have long since come to realize the scientific fact that *the most important single factor in the maintenance of health and recovery from illness is whole nutrition*. This does not deemphasize other factors in health, such as rest, fresh air, potable water, sanitation, hygiene, exercise, and freedom from excess stress.

When modern medicine shall have come to realize fully and universally the importance of these considerations, especially nutrition as contrasted with dietetics, we shall have come a long way in improving the welfare of man by adding the most potent modality to the current armamentarium, which now includes physiotherapy, and the wise and judicious as well as conservative use of drugs and surgery.

All this gives urgent point to the need for the introduction of courses in nutrition proper in all dental and medical schools, and for an intensive development of general nutritional education for public schools, colleges, universities, restaurants, hospitals, and the general public (*Journal of Applied Nutrition*).

—*Oral Hygiene*, November 1960

The Syndrome of Magnesium Deficiency in Man

The clinical and metabolic findings in 3 patients, who had hypomagnesemia without any other electrolyte deficiency, are presented. Tetany in the sense of spontaneous muscular spasms was absent in all 3 patients. The symptoms manifested by these patients differed widely from those usually attributed to magnesium deficiency and consisted of 1) a positive Chvostek's sign without concomitant Trousseau's sign; 2) low-voltage electrocardiogram; 3) epileptiform convulsions and changes in the electro-encephalogram suggesting a focal cerebral lesion; and 4) depression, vertigo, ataxia, and muscular weakness. All the symptoms and signs disappeared as soon as the serum magnesium level was restored.

—*J.A.M.A.*, Oct. 29, 1960

Old Fashioned

Have you noticed that when a person wants to say something especially nice about food, he is likely to refer to it as old fashioned? “Old fashioned strawberry shortcake, old fashioned hickory-smoked sugar-cured ham, old fashioned apple butter.” It makes me hungry just to mention these things.

But suppose a speaker or writer is referring to a medical man or method and he uses the phrase old fashioned. The term immediately takes on a very different meaning. To say of anything medical that it is old fashioned is to condemn it.

“What of it?” you ask. Oh, nothing in particular. But I wonder if in the future the term old fashioned will continue to be one of reproachful condemnation where medicine is concerned. I suspect it may be. And if so, will it not prove that modern medicine is not as faultlessly wonderful as we like to pretend it is?

—*Dental Survey*, July 1960

Gastric Irritant

Experimental as well as statistical evidence indicates that *salicylates*, including *acetylsalicylic acid*, can account for serious gastric disturbances, particularly bleeding. The familiar pattern of exacerbation of ulcer symptoms in the spring and fall may be related to increased salicylate ingestion because of respiratory infections prevalent at these times. Some individuals, particularly those with peptic ulcer, may be exceedingly sensitive to the irritating action of salicylates. In these patients administration of salicylates for analgesia should be undertaken with caution.[7]

Reference

7. Hurley, Ivy, and McArt. *J. Ind. St. Med. Assoc.*, 53:84, 1960.

Therapeutics (Heart Extract)

A.A. Villela, L. Abitbol, and G. Leszeck. “Clinical Investigation on the Use of Heart Extract.” Rev. Brasil. Med., 17:1–8, January 1960 (in Portuguese), Rio de Janeiro.

Forty-seven patients with coronary insufficiency were treated with heart extract for periods of from 3 to 10 weeks. The average dosage was an intramuscular injection daily or every other day, plus a tablet taken 3 times daily. Anginal pain disappeared completely in 7 patients (14.9 percent) and was greatly relieved in 31 (65.9 percent), together with improvement in other subjective symptoms. Six patients (12.8 percent) experienced only a moderate improvement, and 3 (6.4 percent) experienced no improvement.

Electrocardiographic changes were classified as excellent in 8 patients (complete normalization of previously altered leads and repolarization); good in 20 patients (42.5 percent) who had had primary alterations in the T wave and in whom the leads became more positive and closer to normal; fair in 5 patients (10.6 percent) in whom the effects of the treatment were not clear; and negative in 14 patients (29.9 percent). These results indicate that this treatment is effective in arteriosclerotic cardiopathie.

—*J.A.M.A.*, June 18, 1960

Tip of the Month (Milk of Magnesia)

Milk of magnesia (magnesium hydroxide and water) is poisonous to plants and, like aluminum, has the same antidote—silica (*Soil Science*, Vol. XIX, 1925, p. 331).

Apparently, it is the affinity of milk of magnesia for silica that causes the capillary fragility, in this instance, as silica is an integral part of the vascular walls and is necessary to furnish the elasticity to combat vascular fragility.

Lancet, London, 2:167–218, July 23, 1960, Partial Index:

- “Extradural Hematoma,” W. McKissock and others, p. 167
- “Effect of Food, Alcohol, and Hyoscine on Body Temperature,” W.R. Keating and M. Evans, p. 176
- “Syndrome of Magnesium Deficiency in Man,” S. Hanna and others, p. 172
- “Blood Pyruvate and Lactate Response to Sugars,” C. Dodds and others, p. 178
- “Antenatal Determination of Fetal Sex,” P. Rife and F. Fuchs, p. 280

Note: We believe use of milk of magnesia to be one of the most common causes of nosebleed. —*R.L.*

High Points of Standard Process Nutritional Adjuncts

Cardiotrophin PMG: This is the Cytotrophic Extract of Heart (bovine) or that fraction of the chromosome of the cell that catalyzes the synthesis of new cell protein in growth and repair.

This product is designed to increase heart muscle tone and the capacity for exertion, to build and maintain muscle tone throughout the body, and to activate blood sugar pickup by muscle.

The activation of blood sugar pickup makes Cardiotrophin an invaluable aid in controlling blood sugar in the diabetic patient.

One Cardiotrophin tablet is equivalent in effect to the consumption of two to four ounces of fresh raw beef heart.

Cardiotrophin is manufactured under U.S. Patent No. 2374219. “Purpose of the patent is to provide a method of concentrating and drying a juice without materially altering its natural characteristics and nutritional value.”

This entry was posted in Applied Trophology, Volume 4. Bookmark the permalink.

‹ Applied Trophology, Vol. 4, No. 10 (October 1960)

Applied Trophology, Vol. 6, No. 1 (January 1962) ›

Leave a Reply

You must be logged in to post a comment.

Connect with:

Secured by OneAll Social Login

HISTORICAL ARCHIVE SEARCH
Search For...
GO!!

YOUR CART

FEATURED ARCHIVE SUBJECTS
Lee Foundation for Nutritional Research
acid-alkaline balance
digestive health
heart disease
low-carb diet
prenatal nutrition
processed foods and disease
raw foods
soil health and nutrition

RECENT POSTS
Good to Know: Understanding Standard Process Combination Products
21 hours ago
Happy Thanksgiving from SRP!
1 week ago
Dr. Dority on the 33 Royal Principles of Health: #29. Interference with Transmission of Innate Forces
2 weeks ago
Why Phyllis Quinn's Slow Cook Gourmet Is an SRP Fave
3 weeks ago
Dr. Dority on the 33 Royal Principles of Health: #28. The Conductors of Innate Forces
4 weeks ago
Easy Liver Paté for All (with GAPS Stages)!
1 month ago

CONTACT US
+1 (866) 407-9323
+1 (970) 461-4602
5740 Boeing Drive, Loveland, CO. 80538
P.O. Box 270091, Fort Collins, CO. 80527
info@seleneriverpress.com
Guest Blog Post Submission Form

PRODUCT SEARCH
Search for...
GO!

YOUR CART

Good to Know: Understanding Standard Process Combination Products
21 hours ago
Happy Thanksgiving from SRP!
1 week ago
Dr. Dority on the 33 Royal Principles of Health: #29. Interference with Transmission of Innate Forces
2 weeks ago
Why Phyllis Quinn's Slow Cook Gourmet Is an SRP Fave
3 weeks ago
Search Historical Archives...
SEARCH
FEATURED ARCHIVE SUBJECTS
Lee Foundation for Nutritional Research
acid-alkaline balance
digestive health
heart disease
low-carb diet
prenatal nutrition
processed foods and disease
raw foods
soil health and nutrition

ABOUT SELENE RIVER PRESS

Selene River Press is a publishing company specializing in holistic nutrition education. Our philosophy is rooted in the work of Dr. Royal Lee, who showed that vitamin deficiencies, due to processed foods, are responsible for most degenerative disease. From organic farming to food-based vitamins, from raw milk to fermented foods, Dr. Lee set the course for the field of whole food nutrition.

CONTACT US

Toll Free: +1 (866) 407-9323
Local: +1 (970) 461-4602
PO Box 270091, Fort Collins, CO 80527
info@seleneriverpress.com
Guest Blog Post Submission Form

VISA MasterCard AMERICAN EXPRESS DISCOVER PayPal